REMARKS

This is a full and timely response to the outstanding final Office Action mailed May 9, 2008. Through this response, no claims have been amended, and claims 105-111 have been canceled without prejudice, waiver, or disclaimer. Reconsideration and allowance of the application and pending claims 1-16, 20-25, 27-65, and 68-97 are respectfully requested.

I. Election/Restrictions

Applicants have canceled withdrawn claims 105-111 pursuant to the instructions expressed on page 2 of the Office Action.

II. Claim Rejections - 35 U.S.C. § 102(e)

A. Statement of the Rejection

Claims 1-16, 20-24, 27-45, 49-65, 68-73 and 75-94 have been rejected under 35 U.S.C. § 102(e) as allegedly anticipated by *Ukai et al.* ("*Ukai*," U.S. Pat. No. 7,096,486). Applicants respectfully traverse this rejection.

B. Discussion of the Rejection

It is axiomatic that "[a]nticipation requires the disclosure in a single prior art reference of each element of the claim under consideration." *W. L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983). Therefore, every claimed feature of the claimed invention must be represented in the applied reference to constitute a proper rejection under 35 U.S.C. § 102(e).

In the present case, not every claimed feature is represented in the *Ukai* reference. Applicants discuss the *Ukai* reference and Applicants' claims in the following.

Independent Claim 1

Claim 1 recites (with emphasis added):

> 1. A method for providing television functionality comprising:
> tracking a plurality of viewing parameters corresponding to services that are provided to a user;
> ***determining a user preference for each of the plurality of viewing parameters***;
> tracking the user preference by assigning a score to each of the plurality of viewing parameters;
> determining an overall user preference score for the plurality of tracked viewing parameters based on a weighted linear combination of scores associated with each of the plurality of tracked viewing parameters for the user;
> receiving user input requesting television functionality; and
> providing the user with a result that is responsive to the user input and to the overall user preference score.

Applicants respectfully submit that *Ukai* fails to disclose, teach, or suggest at least the above-emphasized claim features. The final Office Action (pages 2-3) alleges that the claimed viewing parameters equate to the elements shown in Figure 3 of *Ukai* (e.g., "program name, date and time, genre, time period, language, and preference measures") and that a view time period "represents a user preference." Applicants note that **each** element or alleged parameter in Figure 3 of *Ukai* does not have an associated user preference. For instance, there is nothing in *Ukai* that describes the year or the month (shown in Figure 3) to be parameters that has a determined user preference. Accordingly, claim 1 is allowable over *Ukai*, and Applicants respectfully request that the rejection be withdrawn.

Because independent claim 1 is allowable over *Ukai*, dependent claims 2-16, 20-24 and 27-45 are allowable as a matter of law for at least the reason that the dependent claims 2-16, 20-24 and 27-45 contain all elements of their respective base claim. See, *e.g.*, *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

Additionally, Applicants respectfully submit that at least dependent claims 8 and 21-24 are allowable under separate grounds, as set forth below.

Claim 8

Claim 8 recites (with emphasis added):

> 8. (Original) The method of claim 1, where the user preference is determined by tracking services that are provided by a ***digital home communication terminal***.

Applicants respectfully submit that *Ukai* fails to disclose, teach, or suggest at least the above-emphasized feature. The final Office Action (page 5) refers to Figure 1 and column 4, lines 8-35 of *Ukai*, reproduced in part below as follows:

> FIG. 1 is a block diagram of a TV program selection support system in a first embodiment according to the present invention applied to a video recording device. An antenna 109 receives a broadcast TV signal. An EPG receiver (electronic program guide receiver) 101 receives an EPG (electronic program guide), and a program receiver 102 receives a program of a tuned channel. The EPG and the program are given to a TV program selection support system 103. The TV program selection support system 103 executes a TV program selection support program 200 to record a program which is considered to be a viewer's favorite program by a picture recording device 105. A viewer views the recorded program displayed by a TV display device 104.
>
> The TV program selection support program 200 is stored in a storage means 108 included in the TV program selection support system 103. When executing the TV program selection support program 200, the TV program selection support program 200 is copied onto a memory included in a control means 107. User operated information, such as program selection by use of a remote controller is inputted to the control means 107 through the operating means 106. The TV program selection support program 200 may be stored in a memory means from which a computer is able to read data, such as a floppy disk or an optical disk, and the TV program selection support program 200 may be read for execution from the memory means.

Applicants respectfully submit that there is nothing in this recited section (or Figure 1 or elsewhere in *Ukai*) to support a ***digital home communication terminal***. Although Applicants understand that claims are to be given their broadest reasonable interpretation, such an interpretation is not without limits as set forth by well-established Federal case law and MPEP 2111, reproduced in part below:

> The Patent and Trademark Office ("PTO") determines the scope of claims in patent applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction "in light of the specification as it would be interpreted by one of ordinary skill in the art." *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364[, 70 USPQ2d 1827] (Fed. Cir. 2004).

Applicants respectfully submit that one having ordinary skill in the art would not interpret the television receiver disclosed in *Ukai* as a ***digital home communication terminal*** when viewed in the context of Applicants specification. For instance, paragraph [0002] of the published application 2003/0110500 (corresponding to the present application) refers to a ***digital home communication terminal*** as supporting two way digital services. There is nothing in *Ukai* to suggest this capability. Accordingly, Applicants respectfully request that the rejection be withdrawn.

Claim 21

Claim 21 recites (emphasis added):

> 21. The method of claim 1, where the overall user preference score for the plurality of tracked viewing parameters is revised using ***statistical analysis***.

The final Office Action (page 7) alleges that statistical analysis is disclosed in Figure 5 and column 5, lines 40-55 of *Ukai*. Applicants respectfully disagree. Column 5, lines 40-55 of *Ukai* provides as follows:

> FIG. 5 shows the formation of the view history table 500 showing view scores and view measures indicating an extent to which each program was viewed. The view history table 500 includes program name 501, view scores 502 and 503 for the serial numbers of series programs, and program view measure 504 obtained by dividing the sum of view scores by the number of serials of the series programs, i.e., mean view score. The view score of a program which is not a series program is entered in a section for the first view score 502. The view score is obtained by dividing a view time period by a program time period. Therefore, the view score is 1.0 when a program is viewed completely. The program view measure 504 is calculated and updated every time the view score 502 or 503 is entered. If a recorded program is viewed repeatedly, the view score for the program is greater than 1.0.

Applicants respectfully submit that there is no mention or suggestion of ***statistical analysis*** in this section or elsewhere in *Ukai*. Accordingly, Applicants respectfully request that the rejection be withdrawn.

Claim 22

Claim 22 recites (emphasis added):

> 22. The method of claim 17, where the overall user preference score for the plurality of tracked viewing parameters is determined using an ***artificial intelligence technology***.

The final Office Action (page 7) alleges that artificial intelligence technology is disclosed in Figure 5 and column 5, lines 40-55 of *Ukai*. Applicants respectfully disagree. As evident from the citation from *Ukai* above, Applicants respectfully submit that there is no mention or suggestion of ***artificial intelligence technology*** in this section or elsewhere in *Ukai*. Accordingly, Applicants respectfully request that the rejection be withdrawn.

Claim 23

Claim 23 recites (emphasis added):

> 23. The method of claim 1, where data identifying the user preference is stored in ***non-volatile memory***.

The final Office Action (page 7) alleges that ***non-volatile memory*** is disclosed in "storage means" in Figure 1. Applicants respectfully disagree. There is no mention or suggestion of ***non-volatile memory*** anywhere in *Ukai*. Accordingly, Applicants respectfully request that the rejection be withdrawn.

Claim 24

Claim 24 recites (with emphasis added):

> 24. The method of claim 1, where data identifying the user preference is stored within a ***digital home communication terminal***.

The final Office Action (page 7) refers to the rejection of claim 23. Applicants respectfully disagree, as there is nothing in claim 23 about a ***digital home communication terminal***. Indeed, the rejection is deficient in that it omits a necessary element of claim 24. Nevertheless, as set forth in the response to the rejection to claim 8, Applicants respectfully submit that *Ukai* fails to disclose, teach, or suggest at least the above-emphasized claim feature and hence Applicants respectfully request that the rejection be withdrawn.

Independent Claim 49

Claim 49 recites (with emphasis added):

> 49. A system for providing television functionality comprising:
> logic for tracking a plurality of viewing parameters corresponding to services that are provided to a user;
> ***logic for determining a user preference for each of the plurality of viewing parameters***;
> logic for tracking the user preference by assigning a score to each of the plurality of viewing parameters;
> logic for determining an overall user preference score for the plurality of tracked viewing parameters based on a weighted linear combination of scores associated with each of the plurality of tracked viewing parameters for the user;
> logic for receiving user input requesting television functionality; and
> logic for providing the user with a result that is responsive to the user input and to the overall user preference score.

Applicants respectfully submit that *Ukai* fails to disclose, teach, or suggest at least the above-emphasized claim features. The final Office Action refers the rejections of claims 49-65, 68-73, and 75-94 to the rejections set forth for claims 1-16, 20-24, and 27-45.

Accordingly, Applicants address the rejections to claims 49-65, 68-73, and 75-94 in the context of the arguments/rejections presented for claims 1-16, 20-24, and 27-45. The final Office Action (pages 2-3) alleges that the claimed viewing parameters equate to the elements shown in Figure 3 of *Ukai* (e.g., "program name, date and time, genre, time period, language, and preference measures") and that a view time period "represents a user preference." Applicants note that **each** element or alleged parameter in Figure 3 of *Ukai* does not have an associated user preference. For instance, there is nothing in *Ukai* that describes the year or the month (shown in Figure 3) to be parameters that has a determined user preference. Accordingly, claim 49 is allowable over *Ukai*, and Applicants respectfully request that the rejection be withdrawn.

Because independent claim 49 is allowable over *Ukai*, dependent claims 50-65, 68-73 and 75-94 are allowable as a matter of law for at least the reason that the dependent claims 50-65, 68-73 and 75-94 contain all elements of their respective base claim. See, *e.g.*, *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

Additionally, Applicants respectfully submit that at least dependent claims 8 and 21-24 are allowable under separate grounds, as set forth below.

Claim 57

Claim 57 recites (with emphasis added):

> 57. The system of claim 49, where the user preference is determined based on tracking services that are provided by a ***digital home communication terminal***.

Applicants respectfully submit that *Ukai* fails to disclose, teach, or suggest at least the above-emphasized feature. The final Office Action (page 5) refers to Figure 1 and column 4, lines 8-35 of *Ukai*, reproduced in part below as follows:

> FIG. 1 is a block diagram of a TV program selection support system in a first embodiment according to the present invention applied to a video

> recording device. An antenna 109 receives a broadcast TV signal. An EPG receiver (electronic program guide receiver) 101 receives an EPG (electronic program guide), and a program receiver 102 receives a program of a tuned channel. The EPG and the program are given to a TV program selection support system 103. The TV program selection support system 103 executes a TV program selection support program 200 to record a program which is considered to be a viewer's favorite program by a picture recording device 105. A viewer views the recorded program displayed by a TV display device 104.
>
> The TV program selection support program 200 is stored in a storage means 108 included in the TV program selection support system 103. When executing the TV program selection support program 200, the TV program selection support program 200 is copied onto a memory included in a control means 107. User operated information, such as program selection by use of a remote controller is inputted to the control means 107 through the operating means 106. The TV program selection support program 200 may be stored in a memory means from which a computer is able to read data, such as a floppy disk or an optical disk, and the TV program selection support program 200 may be read for execution from the memory means.

Applicants respectfully submit that there is nothing in this recited section (or Figure 1 or elsewhere in *Ukai*) to support a ***digital home communication terminal***. Although Applicants understand that claims are to be given their broadest reasonable interpretation, such an interpretation is not without limits as set forth by well-established Federal case law and MPEP 2111, reproduced in part below:

> The Patent and Trademark Office ("PTO") determines the scope of claims in patent applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction "in light of the specification as it would be interpreted by one of ordinary skill in the art." *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364[, 70 USPQ2d 1827] (Fed. Cir. 2004).

Applicants respectfully submit that one having ordinary skill in the art would not interpret the television receiver disclosed in *Ukai* as a digital home communication terminal when viewed in terms of Applicants specification. For instance, paragraph [0002] of the published application 2003/0110500 (corresponding to the present application) refers to a ***digital home communication terminal*** as supporting two way digital services.

There is nothing in *Ukai* to suggest this capability. Accordingly, Applicants respectfully request that the rejection be withdrawn.

Claim 70

Claim 70 recites (emphasis added):

> 70. The system of claim 49, where the overall user preference score for the plurality of tracked viewing parameters is revised using ***statistical analysis***.

The final Office Action (page 7) alleges that statistical analysis is disclosed in Figure 5 and column 5, lines 40-55 of *Ukai*. Applicants respectfully disagree. Column 5, lines 40-55 of *Ukai* provides as follows:

> FIG. 5 shows the formation of the view history table 500 showing view scores and view measures indicating an extent to which each program was viewed. The view history table 500 includes program name 501, view scores 502 and 503 for the serial numbers of series programs, and program view measure 504 obtained by dividing the sum of view scores by the number of serials of the series programs, i.e., mean view score. The view score of a program which is not a series program is entered in a section for the first view score 502. The view score is obtained by dividing a view time period by a program time period. Therefore, the view score is 1.0 when a program is viewed completely. The program view measure 504 is calculated and updated every time the view score 502 or 503 is entered. If a recorded program is viewed repeatedly, the view score for the program is greater than 1.0.

Applicants respectfully submit that there is no mention or suggestion of ***statistical analysis*** in this section or elsewhere in *Ukai*. Accordingly, Applicants respectfully request that the rejection be withdrawn.

Claim 71

Claim 71 recites (emphasis added):

> 71. The system of claim 49, where the overall user preference score for the plurality of tracked viewing parameters is determined using an ***artificial intelligence technology***.

The final Office Action (page 7) alleges that artificial intelligence technology is disclosed in Figure 5 and column 5, lines 40-55 of *Ukai*. Applicants respectfully disagree. As evident from the citation from *Ukai* above, Applicants respectfully submit that there is no mention or suggestion of ***artificial intelligence technology*** in this section or elsewhere in *Ukai*. Accordingly, Applicants respectfully request that the rejection be withdrawn.

Claim 72

Claim 72 recites (emphasis added):

> 72. The system of claim 49, where data identifying the user preference is stored in ***non-volatile memory***.

The final Office Action (page 7) alleges that ***non-volatile memory*** is disclosed in "storage means" in Figure 1. Applicants respectfully disagree. There is no mention or suggestion of ***non-volatile memory*** anywhere in *Ukai*. Accordingly, Applicants respectfully request that the rejection be withdrawn.

Claim 73

Claim 73 recites (with emphasis added):

> 73. The system of claim 49, where data identifying the user preference is stored within a ***digital home communication terminal***.

The final Office Action (page 7) refers to the rejection of claim 23. Applicants respectfully disagree, as there is nothing in claim 23 about a ***digital home communication terminal***. Indeed, the rejection is deficient in that it omits a necessary element of claim 24. Nevertheless, as set forth in the response to the rejection to claim 8, Applicants respectfully submit that *Ukai* fails to disclose, teach, or suggest at least the above-emphasized claim feature and hence Applicants respectfully request that the rejection be withdrawn.

Due to the shortcomings of the *Ukai* reference described in the foregoing, Applicants respectfully assert that *Ukai* does not anticipate Applicants' claims. Therefore, Applicants respectfully request that the rejection of these claims be withdrawn.

III. Claim Rejections - 35 U.S.C. § 103(a)

A. Rejection of Claims 25, 46-48, 74 and 95-97

Claims 25, 46-48, 74 and 95-97 have been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over *Ukai*. Applicants respectfully traverse this rejection.

B. Discussion of the Rejection

The M.P.E.P. § 2100-116 states:

> Office policy is to follow *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), in the consideration and determination of obviousness under 35 U.S.C. 103. . . the four factual inquires enunciated therein as a background for determining obviousness are as follows:
>
> (A) Determining the scope and contents of the prior art;
> (B) Ascertaining the differences between the prior art and the claims in issue;
> (C) Resolving the level of ordinary skill in the pertinent art; and
> (D) Evaluating evidence of secondary considerations.

In the present case, it is respectfully submitted that a *prima facie* case for obviousness is not established using the art of record.

The final Office Action has made the following allegations of Official Notice or well known (location in the Office Action and claim relevance noted in parenthesis):

> (Page 8 and 9, pertaining to claims 25 and 74) The examiner takes Official Notice that preference data can be stored at a headend.

> (Page 9, pertaining to claims 46-48 and 95-97) The examiner takes Official Notice that parental control programs commonly reside on television receiver devices.

Applicants respectfully traverse these allegations of Official Notice and submit that the subject matter pertaining to these claims should not be considered well-known. As provided in MPEP § 2144.03:

> Official notice without documentary evidence to support an examiner's conclusion is permissible only in some circumstances. While "official notice" may be relied on, these circumstances should be rare when an application is under final rejection or action under 37 CFR 1.113. Official notice unsupported by documentary evidence should only be taken by the examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known. As noted by the court in *In re Ahlert*, 424, F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970), the notice of facts beyond the record which may be taken by the examiner must be "capable of such instant and unquestionable demonstration as to defy dispute" (citing *In re Knapp Monarch Co.*, 296 F.2d 230, 132 USPQ 6 (CCPA 1961)).

As provided in MPEP § 2144.03 (emphasis added):

> If applicant adequately traverses the examiner's assertion of official notice, *the examiner must provide documentary evidence in the next Office action* if the rejection is to be maintained. See 37 CFR 1.104(c)(2).

Applicants respectfully submit that in the context of the claim language, such a finding of well known art is improper at least given the added complexity associated with such features as described in respective base claims 1 and 49.

Further, with respect to claims 25 and 74, the focus of *Ukai* involves local storage of preference data, and there is no hint of headend storage anywhere in *Ukai*, and hence the existence of such a feature is not obvious. Indeed, Applicants respectfully submit that the hindsight of storing the preference data at the headend is impermissible, since the motivation or suggestion to add this feature is not found in *Ukai*, not evidenced in the final Office Action as existing elsewhere in the art, and hence is apparently improperly gleaned from Applicants' disclosure. As set forth in MPEP 2142:

> The tendency to resort to "hindsight" based upon applicant"s disclosure is often difficult to avoid due to the very nature of the examination process.

> However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art.

In addition, Applicants respectfully note that the focus of *Ukai* involves enabling viewing of content as preferred by the user. Relying on *Ukai*, one having ordinary skill in the art would not expect there to be a need for PIN access if the content to be viewed was chosen by the viewer. Hence, it is not obvious to combine the Official Notice, nor is it reasonable to take Official Notice, in view of the system design disclosed in *Ukai*.

Accordingly, Applicants traverse the assertions with regard to Official Notice. Because of this traversal, the Office must support its findings with evidence, or withdraw the Official Notice determination.

Additionally, Applicants respectfully submit that for at least the reason that *Ukai* fails to disclose, teach, or suggest the above-emphasized features of base claims 1 and 49, dependent claims in regards to claims 25, 46-48, 74 and 95-97 are allowable as a matter of law.

IV. Canceled Claims

As identified above, claims 105-111 have been canceled from the application through this response without prejudice, waiver, or disclaimer. Applicants reserve the right to present these canceled claims, or variants thereof, in continuing applications to be filed subsequently.

CONCLUSION

Applicants respectfully submit that Applicants' pending claims are in condition for allowance. Any other statements in the Office Action that are not explicitly addressed herein are not intended to be admitted. In addition, any and all findings of inherency are traversed as not having been shown to be necessarily present. Furthermore, any and all findings of well-known art and official notice, and similarly interpreted statements, should not be considered well known since the Office Action does not include specific factual findings predicated on sound technical and scientific reasoning to support such conclusions. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,

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